

10/033,621

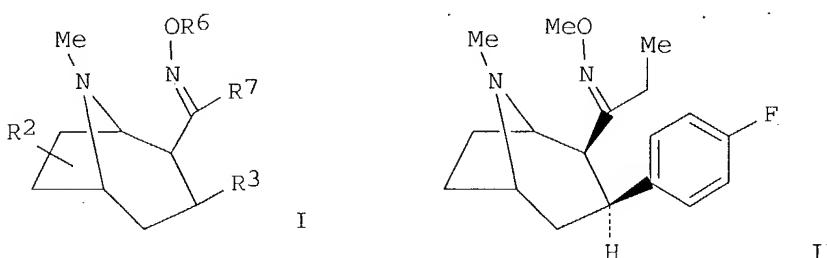
C.A.S. 2/27/04

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L4 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:950993 CAPLUS  
DOCUMENT NUMBER: 140:16849  
TITLE: Preparation of tropane derivatives for treatment or diagnosis of diseases and conditions involving monoamine transporters  
INVENTOR(S): Blundell, Paul; Meltzer, Peter C.; Madras, Bertha K.  
PATENT ASSIGNEE(S): President and Fellows of Harvard College, USA; Organix, Inc.  
SOURCE: PCT Int. Appl., 79 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003099783	A2	20031204	WO 2003-US9432	20030327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003232819	A1	20031218	US 2003-400825	20030327
PRIORITY APPLN. INFO.:			US 2002-368382P	20020328
			US 2002-375505P	20020425

OTHER SOURCE(S): MARPAT 140:16849  
GI



AB This invention relates to novel tropanes, such as I [R2 = H, OH, alkoxy, acyloxy, etc.; R3 = aryl, such as (un)substituted Ph or naphthyl; R6, R7 = H, alkyl, alkenyl, alkynyl, etc.], which have affinity for a monoamine transporter, e.g., the dopamine transporter (DAT), serotonin transporter (SET) or norepinephrine transporter (NET), and which can be useful for the early diagnosis and treatment of diverse neurol. and psychiatric conditions. These tropanes are claimed for use in the treatment or diagnosis of diseases and conditions such as attention deficit hyperactivity disorder (ADHD), Parkinson's disease, cocaine and other drug

10/033,621

*On Review*  
DOCUMENT NUMBER:

TITLE:

X  
INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

139:85526

Preparation of tropane analogs for use in pharmaceutical compositions for inhibition of monoamine transport

Meltzer, Peter Claude; Madras, Bertha Kalifon;

Blundell, Paul

USA

Brit. UK Pat. Appl., 92 pp.

CODEN: BAXXDU

Patent

English

1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

GB 2383581

A1

20030702

GB 2001-31008

20011227

PRIORITY APPLN. INFO.:

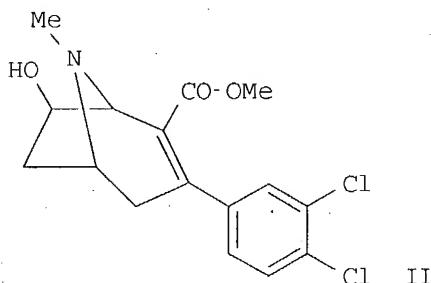
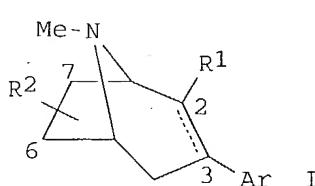
GB 2001-31008

20011227

OTHER SOURCE(S):

MARPAT 139:85526

GI



AB New tropane analogs, such as I [R<sub>1</sub> = carboxy, acyl, alkyl, alkenyl, alkynyl, carboxamide; R<sub>2</sub> = 6- or 7-OH, -Oxo; Ar = unsubstituted- or substituted-Ph, naphthyl, anthracenyl, phenanthracenyl, benzhydryl; 2,3-single or double bond], were prepared for therapeutic uses as inhibitors of monoamine transporters. These tropane analogs are intended for treatment of disorders involving dopamine, serotonin, or norepinephrine transport, such as migraine, cocaine abuse, psychiatric disorders such as depression, neurodegenerative diseases such as Parkinson's and Alzheimer's diseases. Thus, tropane II was prepared via a multistep synthetic sequence which began with a cycloaddn. reaction of acetonedicarboxylic acid anhydride with 2,5-dihydro-2,5-dimethoxyfuran to form the target tropane ring and subsequent coupling reaction of the corresponding intermediate 3-triflate with 3,4-C<sub>6</sub>H<sub>3</sub>B(OH)<sub>2</sub>. Certain preferred compds. of the present invention have a high selectivity for the dopamine transporters vs. the serotonin transporters. Also described are pharmaceutical therapeutic compns. comprising the compds. and a method for inhibiting 5-hydroxytryptamine reuptake of a monoamine transporter by contacting the monoamine transporter with a inhibiting amount of a compound of the present invention.

IT 357924-60-8P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of tropane analogs for therapeutic use as monoamine transport inhibitors)

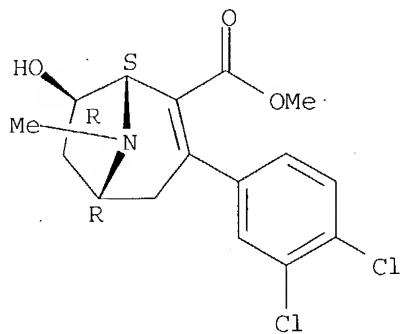
RN 357924-60-8 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-

10/033,621

hydroxy-8-methyl-, methyl ester, (1S,5R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



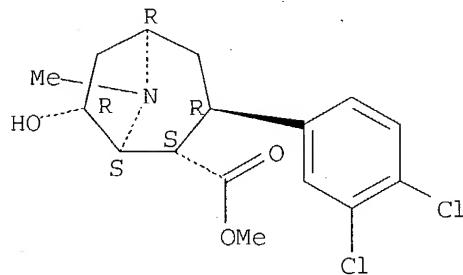
IT 211047-07-3P 357924-86-8P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tropane analogs for therapeutic use as monoamine transport inhibitors)

RN 211047-07-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1S,2S,3R,5R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

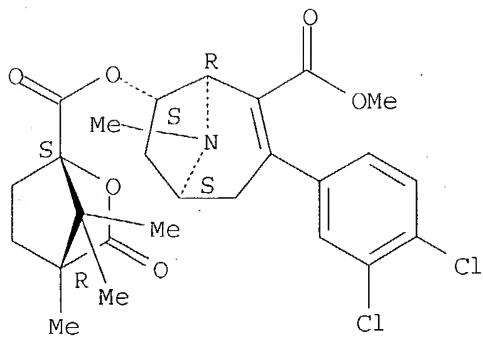


RN 357924-86-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

10/033,621



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

X  
L4 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:492188 CAPLUS  
DOCUMENT NUMBER: 139:77878  
TITLE: Preparation of tropanes, their rhenium and technetium chelates and use as radiopharmaceuticals and diagnostic agents  
INVENTOR(S): Turpin, Frederic; Mauclaire, Laurent; Masri, Fadi; Riche, Francoise; Du Moulinet D'Hardemare, Amaury  
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany  
SOURCE: Fr. Demande, 65 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

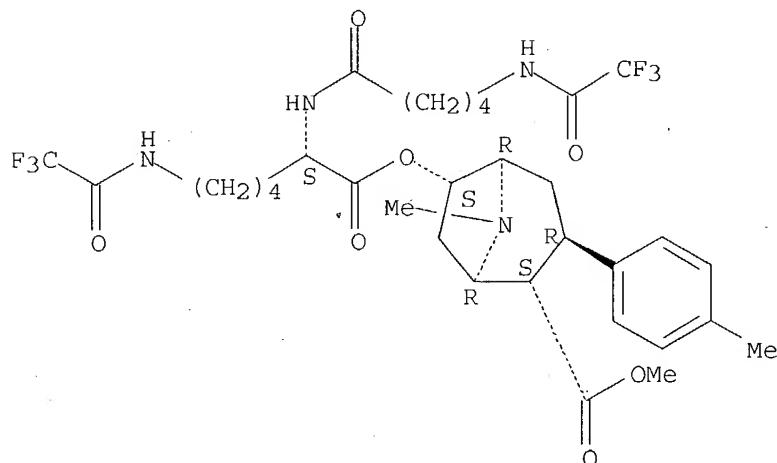
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2833952	A1	20030627	FR 2001-16867	20011226
WO 2003055879	A2	20030710	WO 2002-IB5357	20021213
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: FR 2001-16867 A 20011226  
OTHER SOURCE(S): MARPAT 139:77878  
GI

10/033,621

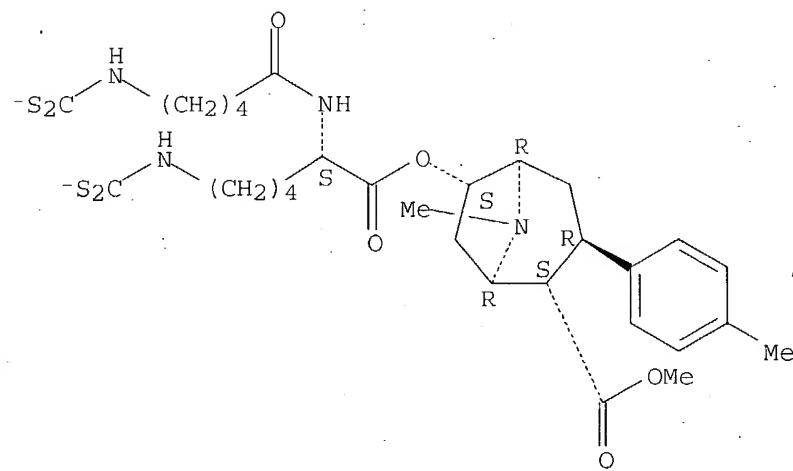
RN 549506-31-2 CAPLUS  
CN L-Lysine, N2-[1-oxo-5-[(trifluoroacetyl)amino]pentyl]-N6-(trifluoroacetyl)-  
(1R,2S,3R,5R,6S)-2-(methoxycarbonyl)-8-methyl-3-(4-methylphenyl)-8-  
azabicyclo[3.2.1]oct-6-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 549506-33-4 CAPLUS  
CN L-Lysine, N6-(dithiocarboxy)-N2-[5-[(dithiocarboxy)amino]-1-oxopentyl]-  
1-[(1R,2S,3R,5R,6S)-2-(methoxycarbonyl)-8-methyl-3-(4-methylphenyl)-8-  
azabicyclo[3.2.1]oct-6-yl] ester, ion(2-) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:154286 CAPLUS  
DOCUMENT NUMBER: 138:198647  
TITLE: Therapeutic boat tropane compounds for treating  
neurological disorders  
INVENTOR(S): Madras, Bertha K.; Meltzer, Peter C.; Blundell, Paul  
PATENT ASSIGNEE(S): President and Fellows of Harvard College, USA;  
Organix, Inc.

10/033,621

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003015830	A1	20030227	WO 2002-US26310	20020816
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

US 2003125352 A1 20030703 US 2002-222530 20020816

PRIORITY APPLN. INFO.: US 2001-313205P P 20010817

OTHER SOURCE(S): MARPAT 138:198647

AB The invention relates to therapeutic uses of boat tropane analogs, e.g., treatment of neurodegenerative disorders. More specifically the invention relates to a method of treating a neurol. disorder in a patient comprising administering to the patient an effective amount of a boat tropane compound. Figure 1 illustrates a general scheme for preparing 2-carbomethoxy tropanes.

IT 187963-28-6 187963-38-8 187963-40-2

187963-42-4 211047-07-3 357924-84-6

357924-85-7 357924-86-8 357924-87-9

357924-88-0 357924-89-1 357924-90-4

357924-96-0 357925-01-0 357925-02-1

357925-03-2 357925-04-3

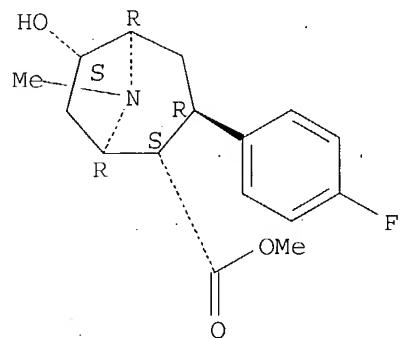
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(therapeutic boat tropane compds. for treating neurol. disorders)

RN 187963-28-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

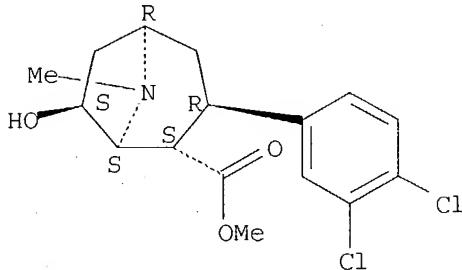


RN 187963-38-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

10/033,621

Relative stereochemistry.

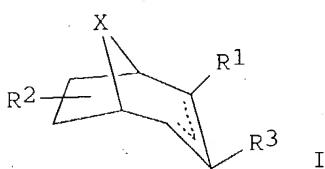


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

*Inventor*

L4 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:671808 CAPLUS  
DOCUMENT NUMBER: 137:217124  
TITLE: Preparation of tropane analogs for inhibition of monoamine transport  
PATENT ASSIGNEE(S): Meltzer, Peter C., USA; Madras, Bertha K.; Blundell, Paul  
SOURCE: Ger. Gebrauchsmusterschrift, 78 pp.  
CODEN: GGXXFR  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 20120708	U1	20020905	DE 2001-20120708	20011221
JP 2003119194	A2	20030423	JP 2001-396980	20011227
US 2003105125	A1	20030605	US 2001-33621	20011227
PRIORITY APPLN. INFO.:			US 2001-327963P	P 20011009
OTHER SOURCE(S):		MARPAT 137:217124		
GI				



AB Tropane analogs, such as I [R1 = acyl, alkyl, alkenyl, alkynyl, carbamoyl; R2 = OH, O, alkyloxy; X = O, CH2, CO, S, SO, SO2; R3 = (un)substituted aryl, naphthyl, anthracenyl, diphenylmethoxy; dashed line = both single or one single and one double bond], that bind selectively to monoamine transporters were prepared for pharmaceutical use. Thus, 2-carbomethoxy-3-(3,4-dichlorophenyl)-6β-hydroxy-8-methyl-8-azabicyclo[3.2.1]oct-2-ene was prepared via a multistep synthetic sequence starting from acetonedicarboxylic acid, 2,5-dimethoxydihydrofuran and 3,4-dichlorophenylboronic acid. The prepared compds. were tested for dopamine and serotonin transporter binding.

IT 454694-04-3P 454694-05-4P

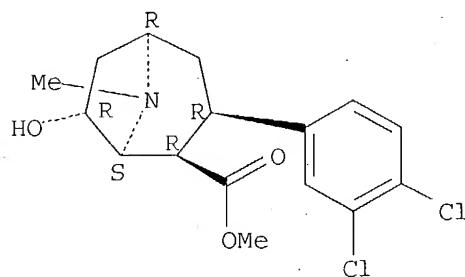
10/033,621

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(crystal structure; preparation of tropane analogs for inhibition of monoamine transport)

RN 454694-04-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1S,2R,3R,5R,7R)- (9CI) (CA INDEX NAME)

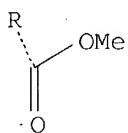
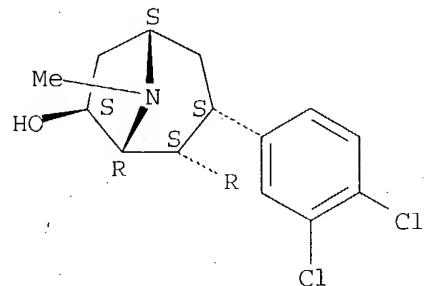
Absolute stereochemistry. Rotation (-).



RN 454694-05-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2S,3S,5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 357924-61-9P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(crystal structure; preparation of tropane analogs for inhibition of monoamine transport)

RN 357924-61-9 CAPLUS

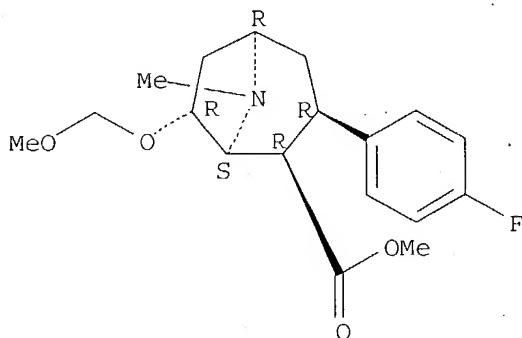
CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

10/033,621

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2S,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

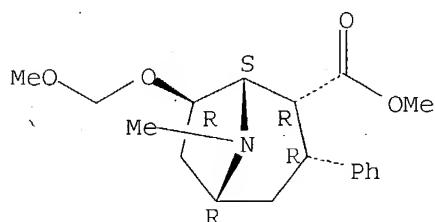
Relative stereochemistry.



RN 454694-27-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-(methoxymethoxy)-8-methyl-3-phenyl-, methyl ester, (1R,2S,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L4 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:474115 CAPLUS

DOCUMENT NUMBER: 135:210919

TITLE: Synthesis of 6- and 7- hydroxy-8-azabicyclo[3.2.1]octanes and their binding affinity for the dopamine and serotonin transporters

Meltzer, Peter C.; Wang, Bing; Chen, Zhengming; Blundell, Paul; Jayaraman, Muthusamy; Gonzalez, Mario D.; George, Clifford; Madras, Bertha K.

Organix Inc., Woburn, MA, 01801, USA

Journal of Medicinal Chemistry (2001), 44(16), 2619-2635

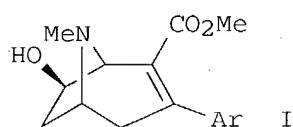
CODEN: JMCMAR; ISSN: 0022-2623  
American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 135:210919

GI



10/033,621

AB Cocaine is a potent stimulant of the central nervous system. Its reinforcing and stimulant effects are related to its ability to inhibit the membrane bound dopamine transporter (DAT). Inhibition of the DAT causes an increase of dopamine in the synapse with a resultant activation of postsynaptic receptors. The rapid onset and short duration of action of cocaine contribute to its high addictive potential. Consequently, the design of tropane analogs of cocaine that display longer onset times on the DAT and extended duration of action is driven by the need to develop cocaine medication. This study extends the exploration of bridge hydroxylated azabicyclo[3.2.1]octanes (tropaines). A series of 6- and 7-hydroxylated tropaines, e.g. I (Ar = 3,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 2-naphthyl, 4-FC<sub>6</sub>H<sub>4</sub>, Ph), was prepared and evaluated biol. Structure activity relationships lead to the following conclusions. Bridge hydroxylated tropaines retain biol. enantioselectivity but display higher DAT vs. SERT selectivity, particularly for the 3 $\alpha$ -aryl compds. as compared with the 3 $\beta$ -aryl compds., than the bridge unsubstituted analogs. The 7-hydroxyl compds. are more potent at the DAT than their 6-hydroxyl counterparts. The general SAR of the tropaines is maintained and the rank order of potencies based on substitution at the C3 position remains 3,4-dichloro > 2-naphthyl > 4-fluoro > Ph. The crystal structure of the products was determined by x-ray anal.

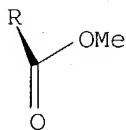
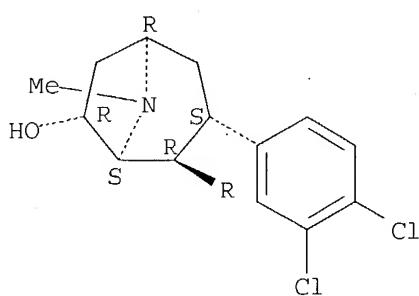
IT 357925-09-8 357925-10-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation and dopamine and serotonin transporter binding affinity of hydroxyazabicyclooctanes)

RN 357925-09-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

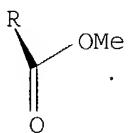
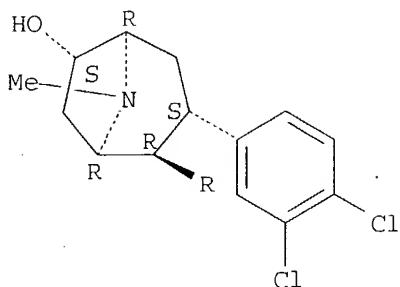


RN 357925-10-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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IT 211047-07-3P 357924-61-9P 357924-86-8P

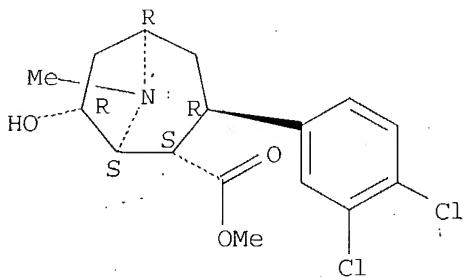
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and dopamine and serotonin transporter binding affinity of hydroxyazabicyclooctanes)

RN 211047-07-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1S,2S,3R,5R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

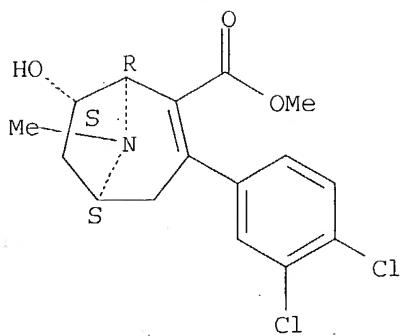


RN 357924-61-9 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

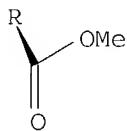
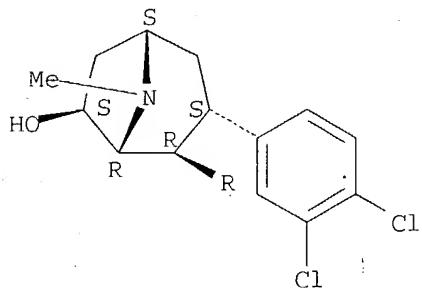
10/033,621



RN 357924-86-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 187963-36-6P 187963-40-2P 187963-42-4P

357924-59-5P

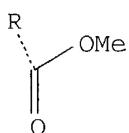
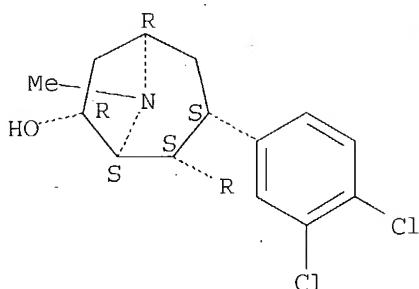
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation and dopamine and serotonin transporter binding affinity of hydroxyazabicyclooctanes)

RN 187963-36-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

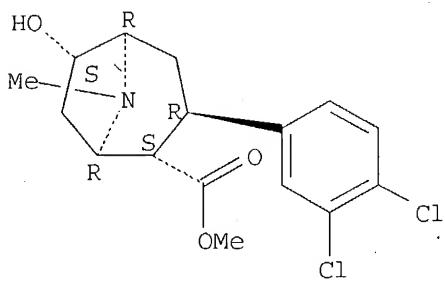
10/033, 621



RN 187963-40-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

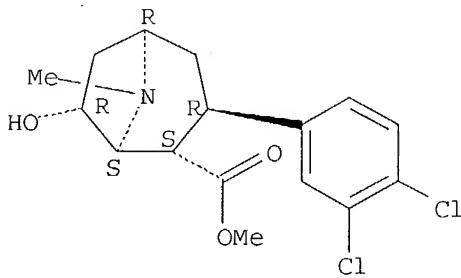
Relative stereochemistry.



RN 187963-42-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

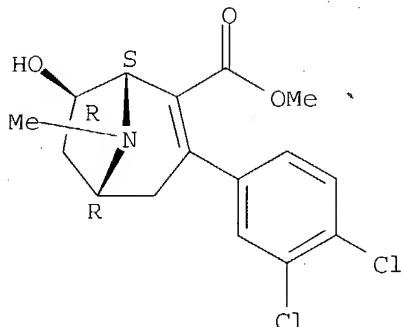


RN 357924-59-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

10/033,621

Relative stereochemistry.



IT 187963-13-9P 187963-28-6P 187963-32-2P  
187963-34-4P 187963-38-8P 211047-06-2P  
357924-55-1P 357924-56-2P 357924-57-3P  
357924-58-4P 357924-60-8P 357924-62-0P  
357924-63-1P 357924-64-2P 357924-76-6P  
357924-77-7P 357924-78-8P 357924-79-9P  
357924-80-2P 357924-84-6P 357924-85-7P  
357924-87-9P 357924-88-0P 357924-89-1P  
357924-90-4P 357924-95-9P 357924-96-0P  
357925-03-2P 357925-04-3P

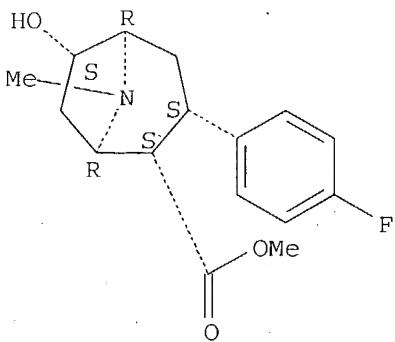
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and dopamine and serotonin transporter binding affinity of hydroxyazabicyclooctanes)

RN 187963-13-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

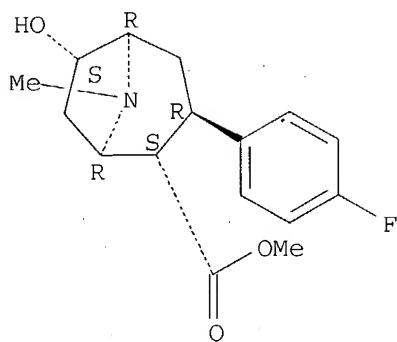


RN 187963-28-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

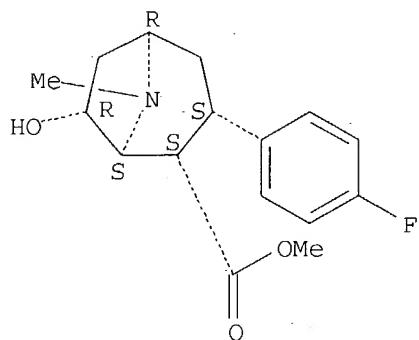
10/033,621



RN 187963-32-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

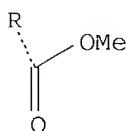
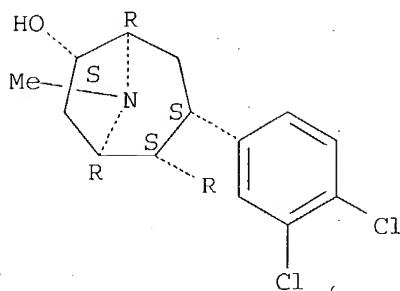
Relative stereochemistry.



RN 187963-34-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

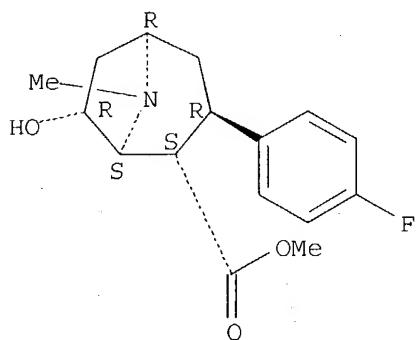


RN 187963-38-8 CAPLUS

10/033,621

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-hydroxy-  
8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

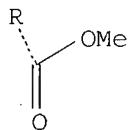
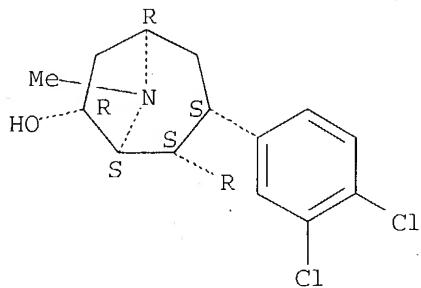
Relative stereochemistry.



RN 211047-06-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-  
hydroxy-8-methyl-, methyl ester, (1S,2S,3S,5R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

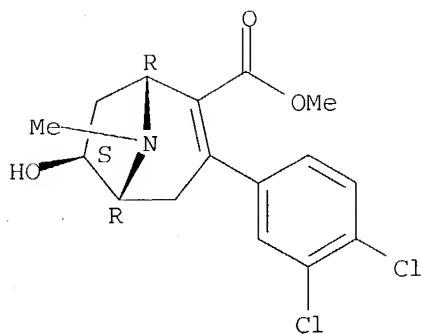


RN 357924-55-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-  
hydroxy-8-methyl-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

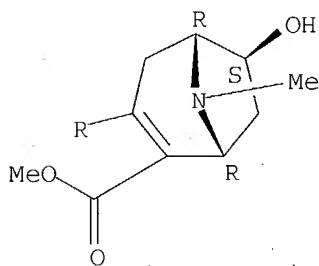
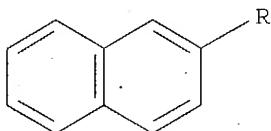
10/033,621



RN 357924-56-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 6-hydroxy-8-methyl-3-(2-naphthalenyl)-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

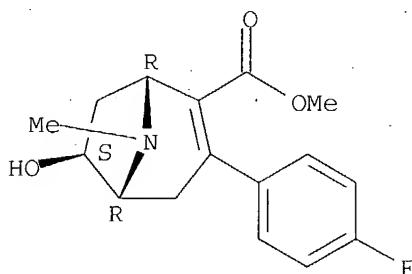
Relative stereochemistry.



RN 357924-57-3 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

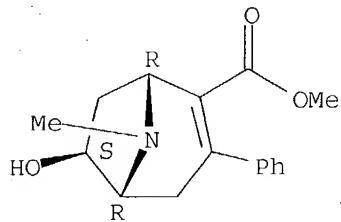


RN 357924-58-4 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 6-hydroxy-8-methyl-3-phenyl-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

10/033,621

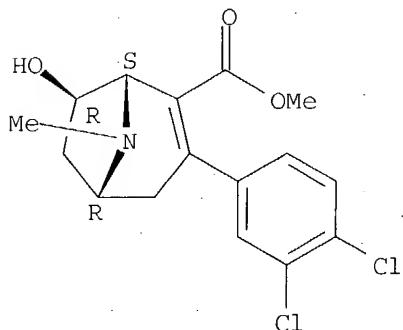
Relative stereochemistry.



RN 357924-60-8 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1S,5R,7R)- (9CI) (CA INDEX NAME)

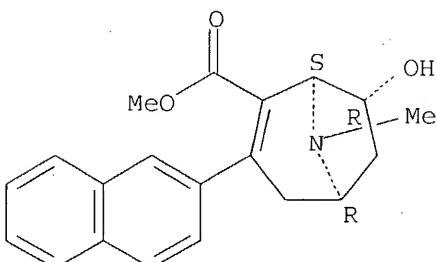
Absolute stereochemistry. Rotation (-).



RN 357924-62-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 7-hydroxy-8-methyl-3-(2-naphthalenyl)-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

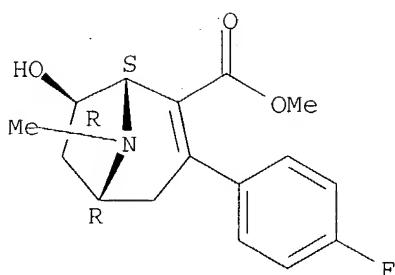


RN 357924-63-1 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

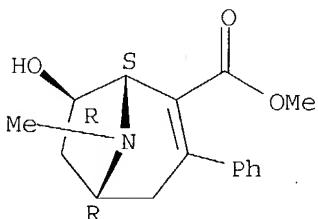
10/033,621



RN 357924-64-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 7-hydroxy-8-methyl-3-phenyl-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

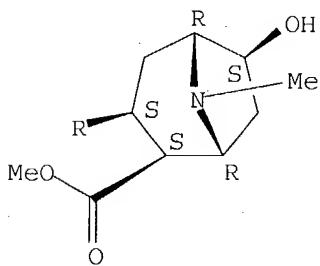
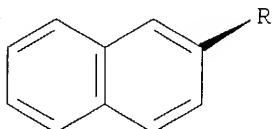
Relative stereochemistry.



RN 357924-76-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(2-naphthalenyl)-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

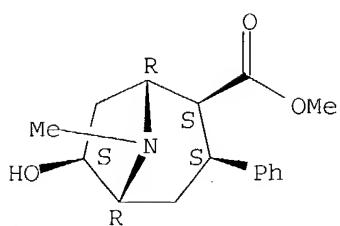


RN 357924-77-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-phenyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

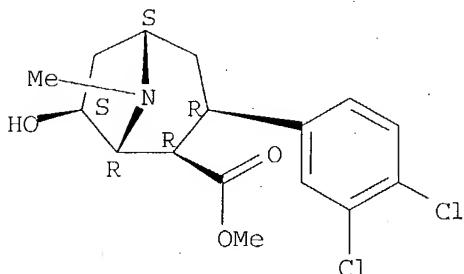
10/033,621



RN 357924-78-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)- (9CI) (CA INDEX NAME)

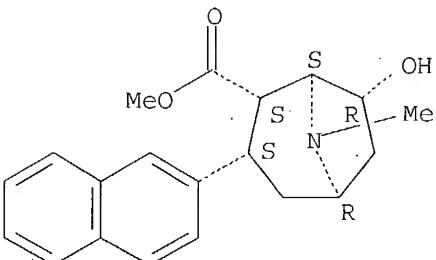
Absolute stereochemistry. Rotation (-).



RN 357924-79-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(2-naphthalenyl)-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

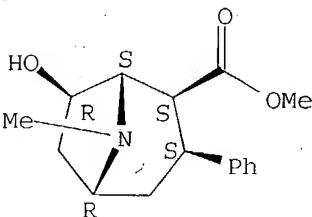
Relative stereochemistry.



RN 357924-80-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-phenyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

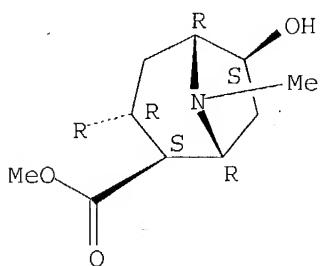
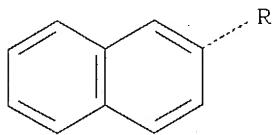


10/033,621

RN 357924-84-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(2-naphthalenyl)-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

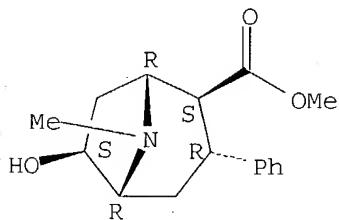
Relative stereochemistry.



RN 357924-85-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-phenyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

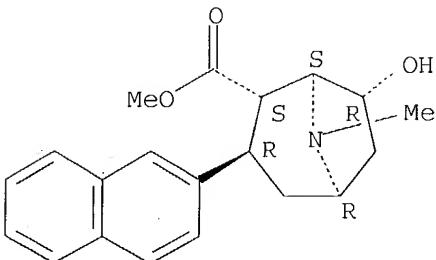
Relative stereochemistry.



RN 357924-87-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(2-naphthalenyl)-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

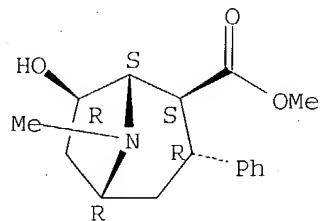


RN 357924-88-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-phenyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

10/033,621

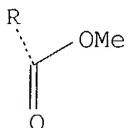
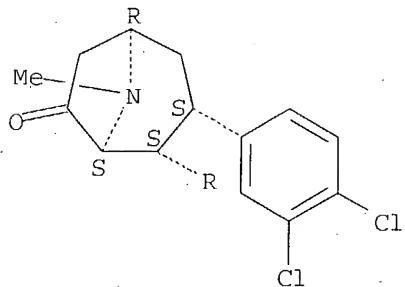
Relative stereochemistry.



RN 357924-89-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-8-methyl-7-oxo-, methyl ester, (1R,2R,3R,5S)-rel- (9CI) (CA INDEX NAME)

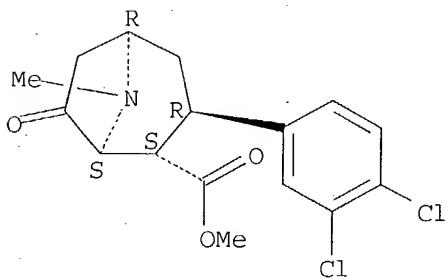
Relative stereochemistry.



RN 357924-90-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-8-methyl-7-oxo-, methyl ester, (1R,2R,3S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

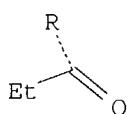
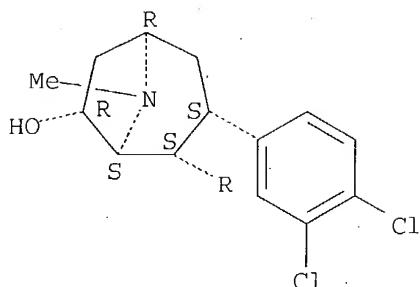


RN 357924-95-9 CAPLUS

CN 1-Propanone, 1-[ (1R,2R,3R,5S,7S)-3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

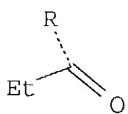
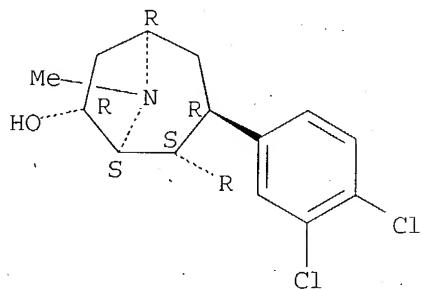
10/033,621



RN 357924-96-0 CAPLUS

CN 1-Propanone, 1-[(1R,2R,3S,5S,7S)-3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-8-azabicyclo[3.2.1]oct-2-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

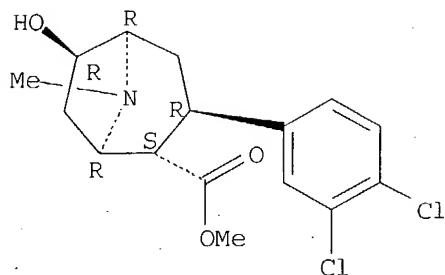


RN 357925-03-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

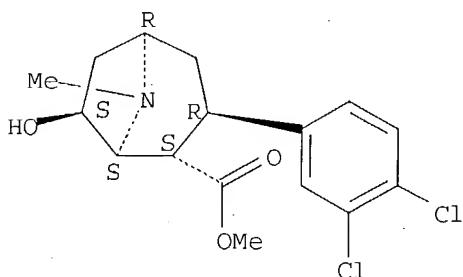
10/033,621



RN 357925-04-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 187963-22-0P 187963-24-2P 187963-26-4P

187963-46-8P 187963-47-9P 187963-48-0P

187963-49-1P 187963-50-4P 187963-51-5P

187963-52-6P 187963-53-7P 187963-54-8P

357924-47-1P 357924-48-2P 357924-49-3P

357924-50-6P 357924-65-3P 357924-66-4P

357924-67-5P 357924-68-6P 357924-69-7P

357924-70-0P 357924-71-1P 357924-72-2P

357924-91-5P 357924-92-6P 357924-93-7P

357924-94-8P 357924-99-3P 357925-01-0P

357925-02-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and dopamine and serotonin transporter binding affinity of hydroxyazabicyclooctanes)

RN 187963-22-0 CAPLUS

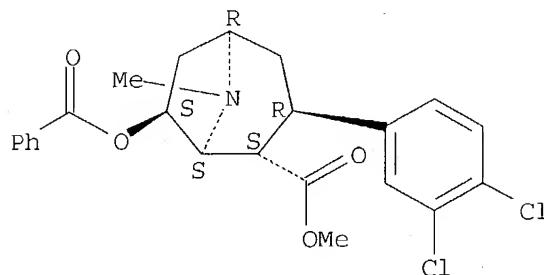
CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

10/033,621

dichlorophenyl)-8-methyl-, methyl ester, (1R,2R,3S,5S,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



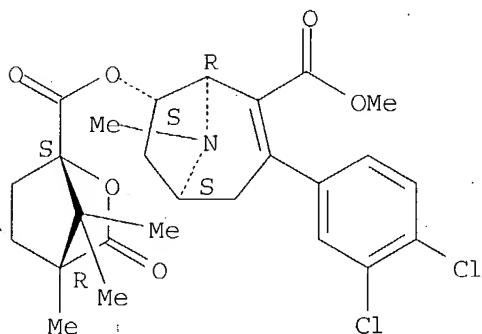
IT 357925-00-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and dopamine and serotonin transporter binding affinity of hydroxyazabicyclooctanes)

RN 357925-00-9 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-8-methyl-7-[[[(1S,4R)-4,7,7-trimethyl-3-oxo-2-oxabicyclo[2.2.1]hept-1-yl]carbonyl]oxy]-, methyl ester, (1R,5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

51

THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:514111 CAPLUS

DOCUMENT NUMBER: 133:267001

TITLE: Chemical Synthesis and Pharmacology of 6- and 7-Hydroxylated 2-Carbomethoxy-3-(*p*-tolyl)tropanes: Antagonism of Cocaine's Locomotor Stimulant Effects

AUTHOR(S): Zhao, Lianyun; Johnson, Kenneth M.; Zhang, Mei; Flippin-Anderson, Judith; Kozikowski, Alan P.

CORPORATE SOURCE: Drug Discovery Program Department of Neurology, Georgetown University Medical Center, Washington, DC, 20007-2197, USA

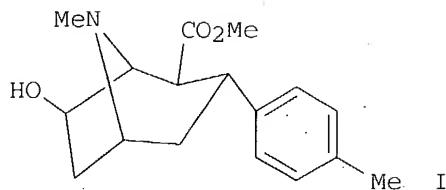
SOURCE: Journal of Medicinal Chemistry (2000), 43(17), 3283-3294

PUBLISHER: CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

DOCUMENT TYPE: Journal  
LANGUAGE: English

10/033,621

GI



AB To identify mols. that might act as cocaine antagonists or cocaine partial agonists, efforts were made to further capitalize on an earlier finding regarding the ability of a 7-methoxylated pseudococaine analog to act as a weak cocaine functional antagonist. A series of the 6- and 7-hydroxylated WIN analogs possessing a boat or chair conformation of the tropane ring were prepared and tested for their ability to displace [3H]mazindol binding and to inhibit high-affinity monoamine uptake into rat brain nerve endings. These 6- and 7-hydroxylated WIN analogs were readily prepared by use of a classical Willstaetter synthesis to construct an appropriately functionalized tropane ring followed by use of a Suzuki coupling reaction to introduce the aryl group at position 3. Reduction of the resulting tropene by use of SmI<sub>2</sub> or by catalytic hydrogenation followed by deprotection delivered the final target compds. Some of these compds. were found to retain considerable affinity as inhibitors of the dopamine transporter (DAT) and the norepinephrine transporter (NET), but they were less potent inhibitors of the serotonin transporter (SERT). None of the compds. of the present series revealed any substantial potency difference in [3H]mazindol binding vs. [3H]DA uptake, and failed to show "cocaine antagonism" when tested for their ability to prevent cocaine's inhibition of DA transport. One of these hydroxylated WIN analogs, I which possesses nanomolar potency at the DAT and NET and micromolar potency at the SERT, when tested in vivo, was found capable of attenuating cocaine's locomotor activity (AD50 = 94 mg/kg). This work provides further support for the hypothesis that drugs that lack the ability to inhibit transport by all three monoaminergic transporters may exhibit "partial" cocaine-like properties, but act as cocaine antagonists. It may prove valuable to examine the behavioral activity of other 6- and 7-substituted tropanes in animal behavioral paradigms in the search for a cocaine medication.

IT 297772-62-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

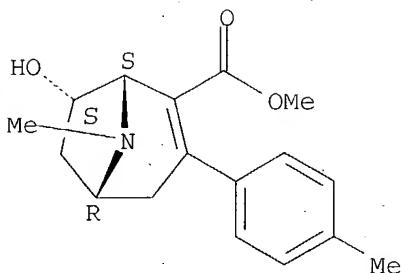
(preparation of 6- and 7-hydroxylated 2-carbomethoxy-3-(p-tolyl)tropanes and their antagonism of cocaine's locomotor stimulant effects)

RN 297772-62-4 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,5S,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

10/033,621



IT 245404-67-5P 297772-76-0P

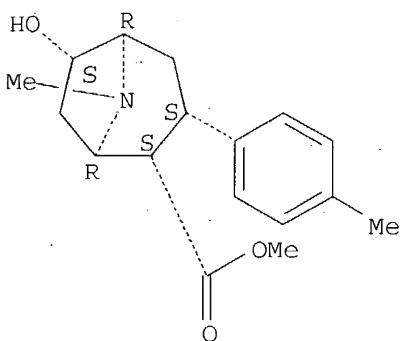
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of 6- and 7-hydroxylated 2-carbomethoxy-3-(*p*-tolyl)tropanes and their antagonism of cocaine's locomotor stimulant effects)

RN 245404-67-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

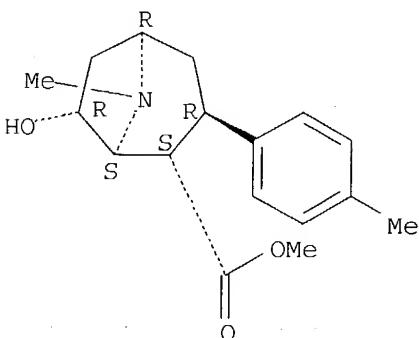
Relative stereochemistry.



RN 297772-76-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 297772-60-2P 297772-66-8P 297772-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL

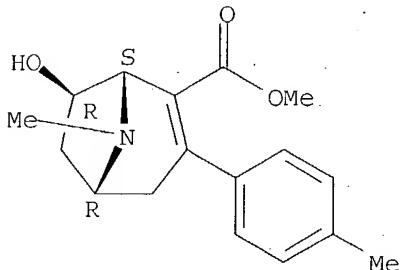
10/033,621

(Biological study); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 6- and 7-hydroxylated 2-carbomethoxy-3-(*p*-tolyl)tropanes and  
their antagonism of cocaine's locomotor stimulant effects)

RN 297772-60-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-  
methylphenyl)-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

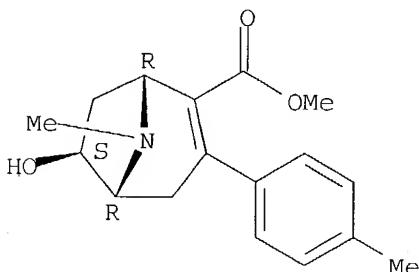
Relative stereochemistry.



RN 297772-66-8 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-  
methylphenyl)-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

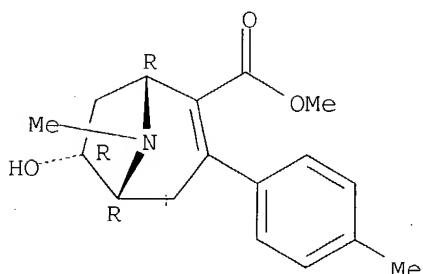
Relative stereochemistry.



RN 297772-68-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-  
methylphenyl)-, methyl ester, (1R,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 245404-68-6P 245404-69-7P 245404-70-0P  
297772-75-9P 297772-77-1P 297772-78-2P  
297772-79-3P 297772-81-7P 297772-82-8P  
297772-83-9P 297772-84-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

10/033,621

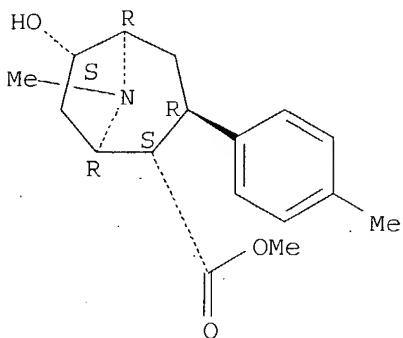
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of 6- and 7-hydroxylated 2-carbomethoxy-3-(*p*-tolyl)tropanes and their antagonism of cocaine's locomotor stimulant effects)

RN 245404-68-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI). (CA INDEX NAME)

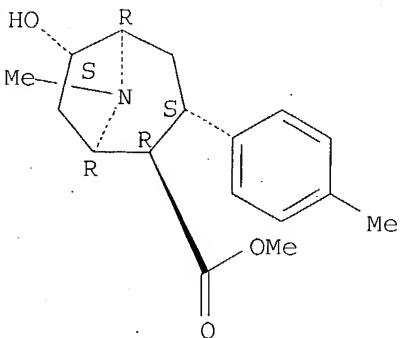
Relative stereochemistry.



RN 245404-69-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

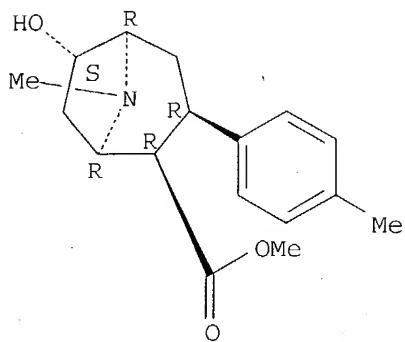


RN 245404-70-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

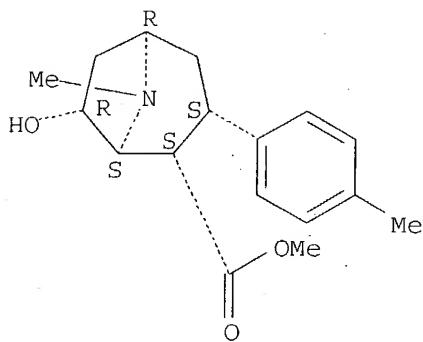
10/033,621



RN 297772-75-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

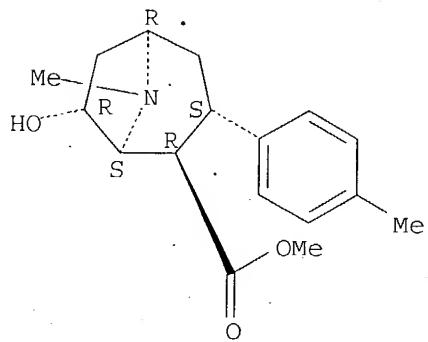
Relative stereochemistry.



RN 297772-77-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

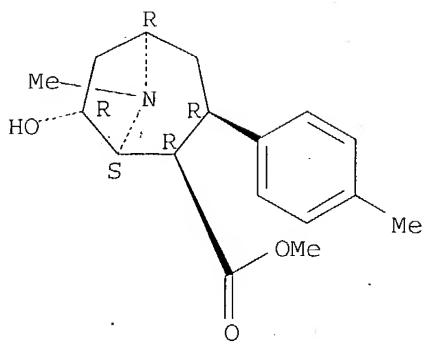


RN 297772-78-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

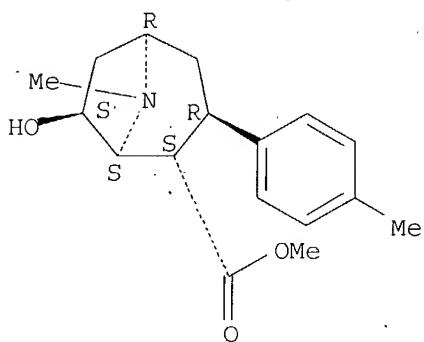
10/033,621



RN 297772-79-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 7-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3S,5S,7R)-rel- (9CI) (CA INDEX NAME)

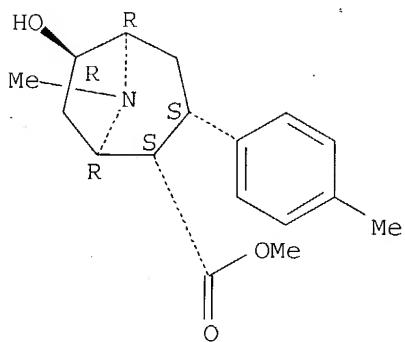
Relative stereochemistry.



RN 297772-81-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3S,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

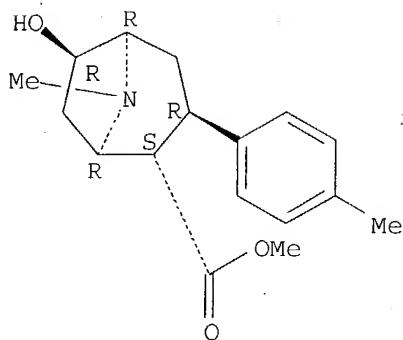


RN 297772-82-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3R,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

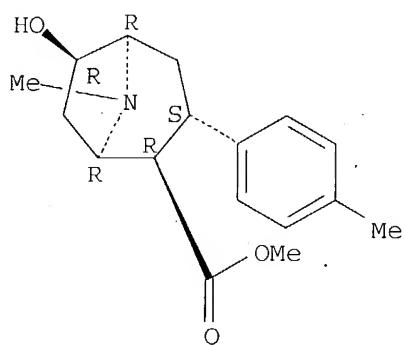
10/033,621



RN 297772-83-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3S,5R,6R)-rel- (9CI) (CA INDEX NAME)

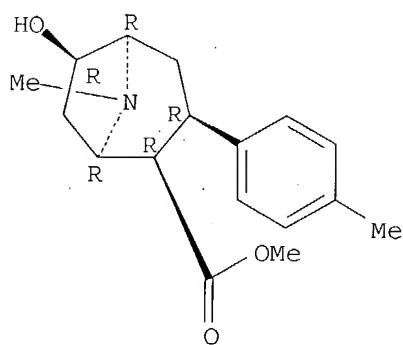
Relative stereochemistry.



RN 297772-84-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3R,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 245404-75-5P 297772-64-6P

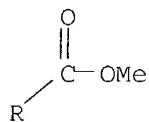
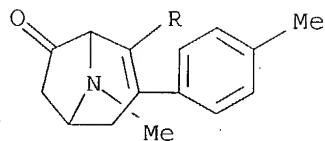
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 6- and 7-hydroxylated 2-carbomethoxy-3-(p-tolyl)tropanes and their antagonism of cocaine's locomotor stimulant effects)

RN 245404-75-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-[[[(1,1-

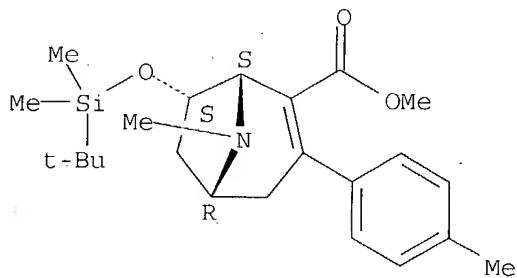
10/033, 621



RN 297772-63-5 CAPLUS

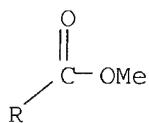
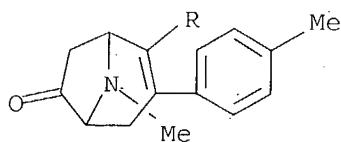
CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 7-[(1,1-dimethylethyl)dimethylsilyl]oxy]-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,5S,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 297772-67-9 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 8-methyl-3-(4-methylphenyl)-6-oxo-, methyl ester (9CI) (CA INDEX NAME)



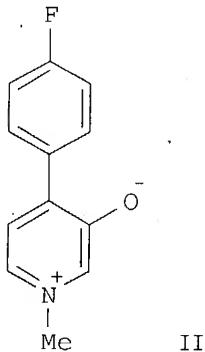
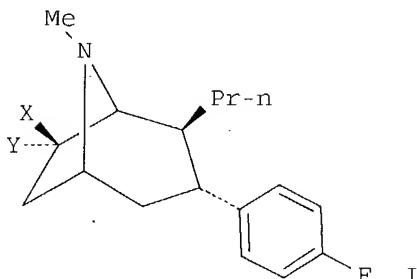
RN 297772-70-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-[(1,1-dimethylethyl)dimethylsilyl]oxy]-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3S,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

10/033, 621

L4 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:458490 CAPLUS  
DOCUMENT NUMBER: 133:208016  
TITLE: An enantioselective synthesis and biobehavioral evaluation of 7-fluoro-3-(p-fluorophenyl)-2-propyltropanes  
AUTHOR(S): Prakash, K. R. C.; Trzcińska, Monika; Johnson, Kenneth M.; Kozikowski, Alan P.  
CORPORATE SOURCE: Drug Discovery Program, Institute for Cognitive and Computational Sciences, Georgetown University Medical Center, Washington, DC, 20007-2197, USA  
SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(13), 1443-1446  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 133:208016  
GI



AB Optically pure 7-fluorotropes (I) ( $X = H, F; Y = H, F; X=Y = F$ ), were synthesized as structural probes of the dopamine transporter. The synthesis of I was accomplished through the asym. 1,3-dipolar cycloaddn. reaction of the oxidopyridinium betaine (II) with the chiral dipolarophile ( $R$ )-p-tolyl vinyl sulfoxide. In the preliminary anal., tropane I ( $X = H, Y = F$ ) (III) was found to reduce the rewarding effects of cocaine in the brain stimulation reward paradigm.

IT 290810-00-3P 290810-01-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

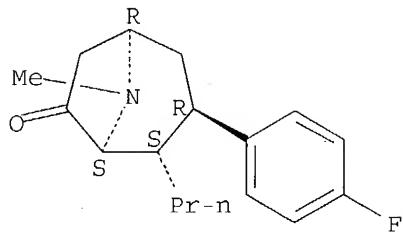
(synthesis and biobehavioral evaluation of 7-fluoro-3-(p-fluorophenyl)-2-propyltropanes)

RN 290810-00-3 CAPLUS

CN 8-Azabicyclo[3.2.1]octan-6-one, 3-(4-fluorophenyl)-8-methyl-4-propyl-, (1R,3R,4S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

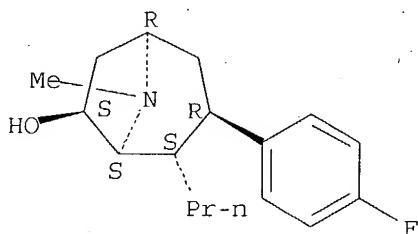
10/033, 621



RN 290810-01-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octan-6-ol, 3-(4-fluorophenyl)-8-methyl-4-propyl-,  
(1R,3R,4S,5S,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:429223 CAPLUS

DOCUMENT NUMBER: 131:272043

TITLE: Synthesis of the  $2\beta,3\beta$ -,  $2\alpha,3\beta$ -,  
 $2\beta,3\alpha$ - and  $2\alpha,3\alpha$ - isomers of  
6 $\beta$ -hydroxy-3-(p-tolyl)tropane-2-carboxylic acid  
methyl ester

AUTHOR(S): Zhao, Lianyun; Kozikowski, Alan P.

CORPORATE SOURCE: Drug Discovery Program, Georgetown University Medical Center, Institute for Cognitive and Computational Sciences, Washington, DC, 20007-2197, USA

SOURCE: Tetrahedron Letters (1999), 40(27), 4961-4964

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:272043

AB 6-Hydroxytropone was synthesized by a Mannich type condensation between acetonedicarboxylic acid, methylamine hydrochloride, and the hydrolysis product of 2,5-dimethoxydihydrofuran and was used as the key intermediate for the synthesis of the four racemic isomers of 6 $\beta$ -hydroxy-2-(methoxycarbonyl)-3-(p-tolyl)tropane. The IC50 and Ki values for inhibition of mazindol binding at DAT were determined for the compds.

IT 245404-67-5P 245404-68-6P 245404-69-7P

245404-70-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

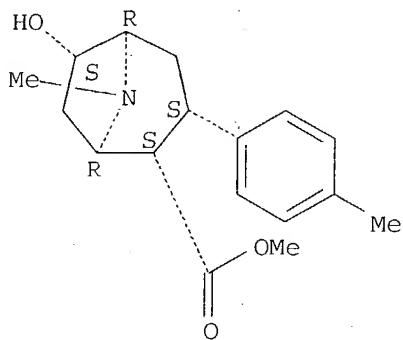
(synthesis of  $2\beta,3\beta$ -,  $2\alpha,3\beta$ -,  $2\beta,3\alpha$ -  
and  $2\alpha,3\alpha$ - isomers of 6 $\beta$ -hydroxy-3-(p-tolyl)tropane-2-  
carboxylic acid Me ester)

RN 245404-67-5 CAPLUS

10/033,621

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

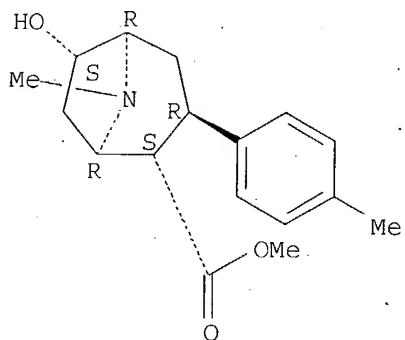
Relative stereochemistry.



RN 245404-68-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

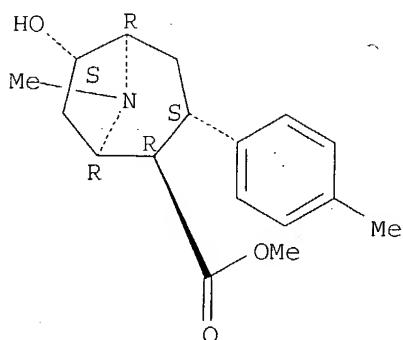
Relative stereochemistry.



RN 245404-69-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

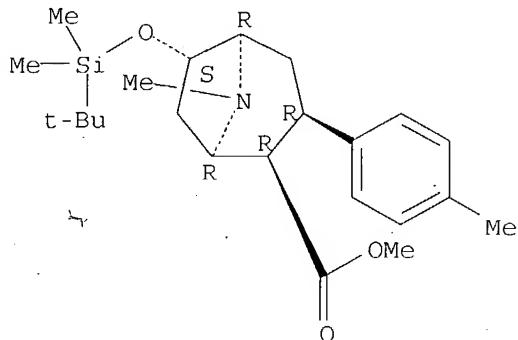


RN 245404-70-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 6-hydroxy-8-methyl-3-(4-methylphenyl)-, methyl ester, (1R,2R,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

10/033,621

Relative stereochemistry.



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:64802 CAPLUS

DOCUMENT NUMBER: 130:125255

TITLE: Preparation of tropane analogs and methods for inhibition of monoamine transport

INVENTOR(S): Meltzer, Peter C.; Madras, Bertha K.; Blundell, Paul; Chen, Zhengming

PATENT ASSIGNEE(S): Organix, Inc., USA; President and Fellows of Harvard College

SOURCE: PCT Int. Appl., 111 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

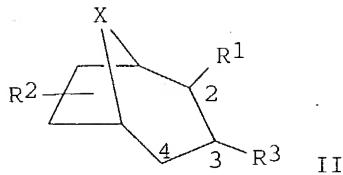
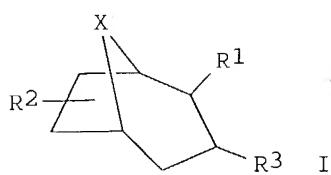
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9902526	A1	19990121	WO 1998-US14326	19980710
W: CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5948933	A	19990907	US 1997-893921	19970711
EP 996619	A1	20000503	EP 1998-934396	19980710
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001509508	T2	20010724	JP 2000-502048	19980710
US 6353105	B1	20020305	US 1999-314441	19990519
US 6417221	B1	20010918	US 2000-671534	20000927
US 2002010207	A1	20020124	US 2001-875523	20010606
US 6670375	B2	20031230		
US 2003069269	A1	20030410	US 2002-97062	20020313
PRIORITY APPLN. INFO.:			US 1997-893921	A 19970711
			US 1995-552584	A1 19951103
			WO 1998-US14326	W 19980710
			US 1999-314441	A3 19990519
			US 2000-671534	A1 20000927
			US 2001-875523	A1 20010606

OTHER SOURCE(S): MARPAT 130:125255  
GI

10/033, 621



AB Tropane analogs I and II [R1 = CO<sub>2</sub>Me, acyl, carbamoyl, etc.; R2 = OH, halogen, alkyloxy, amino, etc.; R3 = Ph, naphthyl, diphenylmethoxy, etc.; X = O, CH<sub>2</sub>, CO, S, SO, SO<sub>2</sub>, NR<sub>4</sub>; R4 = alkyl, alkylsulfonyl, etc.; C<sub>2</sub>-C<sub>3</sub> or C<sub>3</sub>-C<sub>4</sub> unsatd.] that bind selectively to monoamine transporters were prepared and formulated for pharmaceutical use inhibiting 5-HT re-uptake. Thus, 2-carbomethoxy-8-oxabicyclo[3.2.1]octan-3-one was prepared in 37% yield by cyclization of 2,5-dimethoxytetrahydofuran with 1,3-bis(trimethylsiloxy)-1-methoxybuta-1,3-diene. The prepared compds. were tested for dopamine, serotonin, and norepinephrine transporter binding.

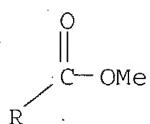
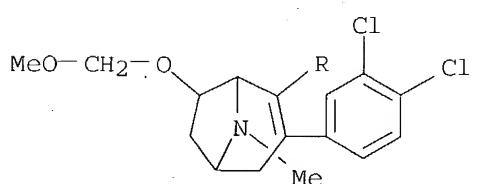
IT 219932-00-0P 219932-01-1P 219932-02-2P  
219932-03-3P 219932-04-4P 219932-05-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tropane analogs and methods for inhibition of monoamine transport)

RN 219932-00-0 CAPLUS

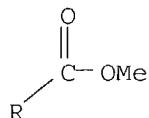
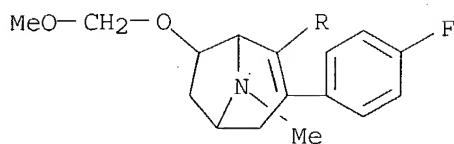
CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester (9CI) (CA INDEX NAME)



RN 219932-01-1 CAPLUS

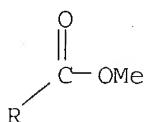
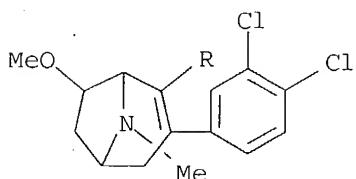
CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester (9CI) (CA INDEX NAME)

10/033,621



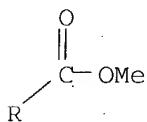
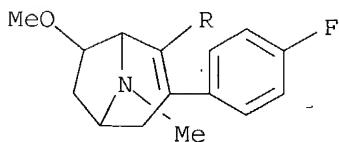
RN 219932-02-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-methoxy-8-methyl-, methyl ester (9CI) (CA INDEX NAME)



RN 219932-03-3 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-7-methoxy-8-methyl-, methyl ester (9CI) (CA INDEX NAME)

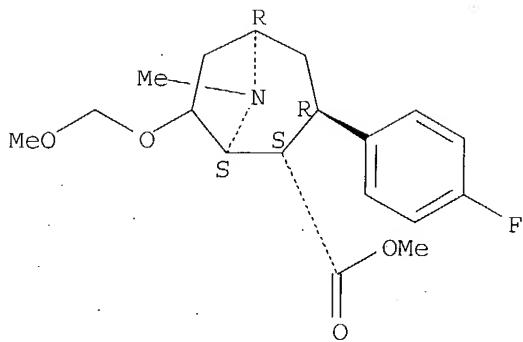


RN 219932-04-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

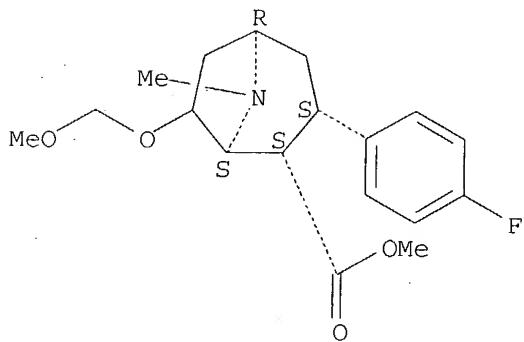
10/033,621



RN 219932-05-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3R,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 219931-83-6P 219931-84-7P 219931-85-8P

219931-86-9P 219931-87-0P 219931-88-1P

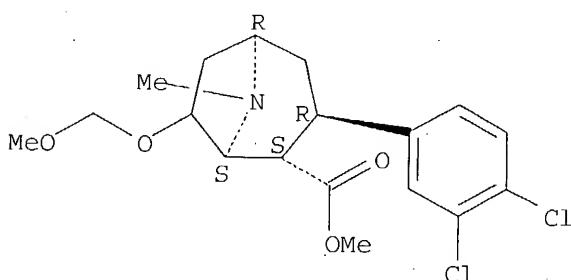
219931-89-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tropane analogs and methods for inhibition of monoamine transport)

RN 219931-83-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

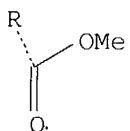
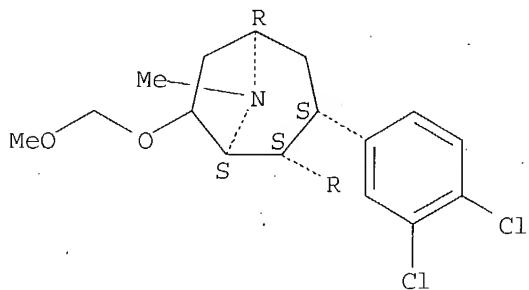


10/033,621

RN 219931-84-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3R,5S)-rel- (9CI) (CA INDEX NAME)

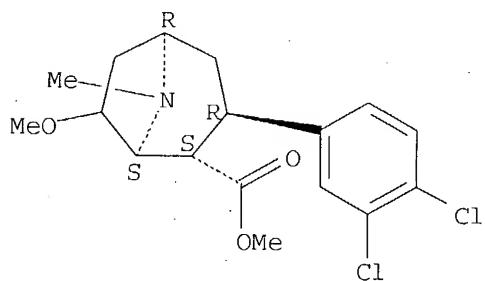
Relative stereochemistry.



RN 219931-85-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-methoxy-8-methyl-, methyl ester, (1R,2R,3S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

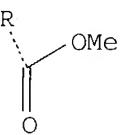
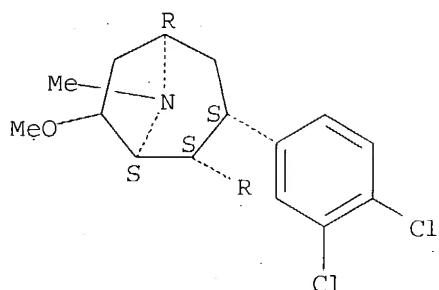


RN 219931-86-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-methoxy-8-methyl-, methyl ester, (1R,2R,3R,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

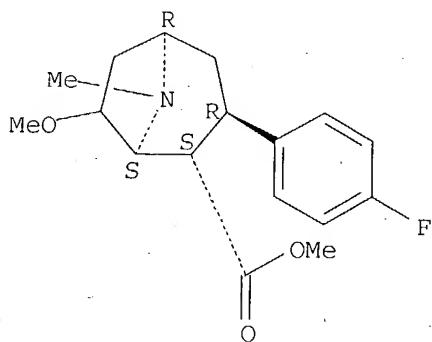
10/033,621



RN 219931-87-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-methoxy-8-methyl-, methyl ester, (1R,2R,3S,5S)-rel- (9CI) (CA INDEX NAME)

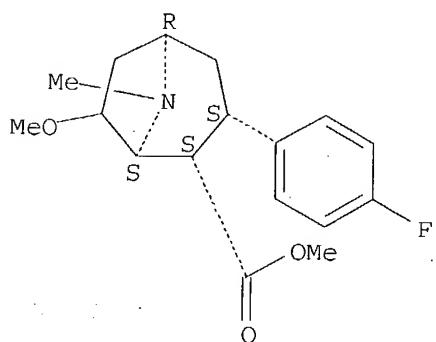
Relative stereochemistry.



RN 219931-88-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-methoxy-8-methyl-, methyl ester, (1R,2R,3R,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



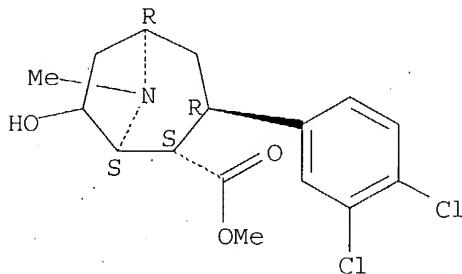
RN 219931-89-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-

10/033,621

hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:402146 CAPLUS

DOCUMENT NUMBER: 129:175818

TITLE: Synthesis and biological activity of new 6- and 7-substituted 2 $\beta$ -butyl-3-phenyltropanes as ligands for the dopamine transporter

AUTHOR(S): Prakash, K. R. C.; Araldi, Gian Luca; Smith, Miles P.; Zhang, Mai; Johnson, Kenneth M.; Kozikowski, Alan P. Georgetown University Medical Center, Drug Discovery Program, Institute for Cognitive and Computational Sciences, Washington, DC, 20007-2197, USA

CORPORATE SOURCE: Medicinal Chemistry Research (1998), 8(1/2), 43-58

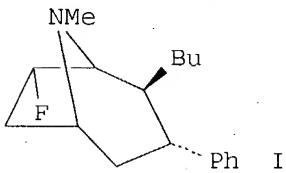
SOURCE: CODEN: MCREEB; ISSN: 1054-2523

PUBLISHER: Birkhaeuser Boston

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The synthesis and biol. activity of 2 $\beta$ -butyl-3-phenyltropane derivs. with the Ph ring in the  $\alpha$ - or  $\beta$ -configuration and bearing different substituents at the 6- and 7-positions of the tropane ring were studied. All the compds. synthesized showed micromolar or submicromolar affinity for the DAT in the rat striatum. The 7 $\alpha$ -fluoro-3 $\alpha$ -phenyltropane derivative I was found to be the most potent, inhibiting mazindol binding with a Ki of 0.20  $\mu$ M and dopamine reuptake with a Ki of 0.49  $\mu$ M.

IT 211516-81-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

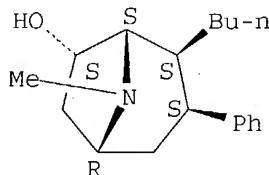
(preparation and biol. activity of new 6- and 7-substituted 2 $\beta$ -butyl-3-phenyltropanes as ligands for the dopamine transporter)

RN 211516-81-3 CAPLUS

10/033,621

CN 8-Azabicyclo[3.2.1]octan-6-ol, 4-butyl-8-methyl-3-phenyl-,  
(1R,3S,4S,5S,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



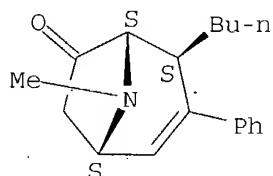
IT 211516-79-9P 211516-80-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and biol. activity of new 6- and 7-substituted  
2β-butyl-3-phenyltropanes as ligands for the dopamine transporter)

RN 211516-79-9 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-en-6-one, 4-butyl-8-methyl-3-phenyl-,  
(1R,4R,5R)-rel- (9CI) (CA INDEX NAME)

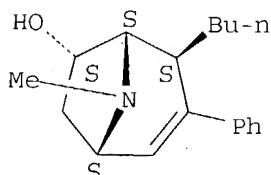
Relative stereochemistry.



RN 211516-80-2 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-en-6-ol, 4-butyl-8-methyl-3-phenyl-,  
(1R,4R,5R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:402144 CAPLUS

DOCUMENT NUMBER: 129:156457

TITLE: Structure activity relationships of inhibition of the dopamine transporter by 3-aryl bicyclo[3.2.1]octanes

AUTHOR(S): Meltzer, Peter C.; Blundell, Paul; Madras, Bertha K.

CORPORATE SOURCE: Organix Inc, Woburn, MA, 01801, USA

SOURCE: Medicinal Chemistry Research (1998), 8(1/2), 12-34

CODEN: MCREEB; ISSN: 1054-2523

PUBLISHER: Birkhaeuser Boston

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In this report we present an overview of the Structure Activity

10/033,621

Relationships (SAR) which govern the interaction of 3-arylbicyclo[3.2.1]octanes (tropane analogs) with the dopamine transporter (DAT). Data for inhibition of the DAT by bicyclo[3.2.1]octanes modified at C-2, C-3, C-7 and 8-N are presented and discussed. We postulate that the three dimensional volume of the bicyclo[3.2.1]octanes influences binding to the DAT and may play a greater role in inhibition of the transporter than does the presence of specific functionality.

IT 211047-05-1P, O 1112 211047-06-2P, O 1164

211047-07-3P, O 1163

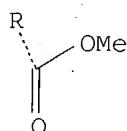
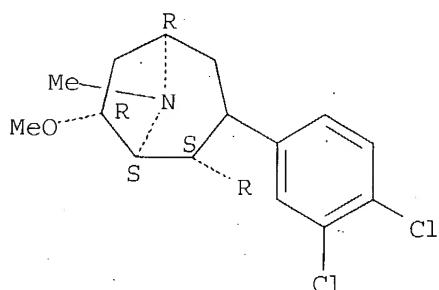
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(structure activity relationships of inhibition of dopamine transporter by 3-arylbicyclo[3.2.1]octanes)

RN 211047-05-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-methoxy-8-methyl-, methyl ester, (1S,2S,5R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

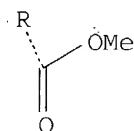
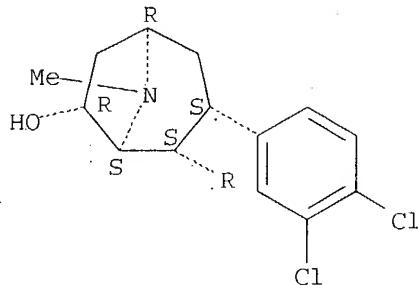


RN 211047-06-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1S,2S,3S,5R,7R)- (9CI) (CA INDEX NAME)

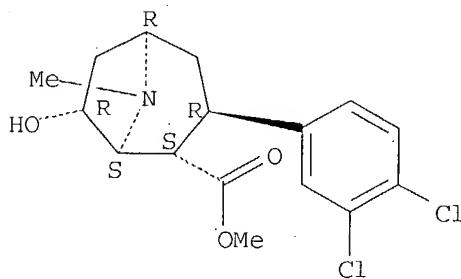
Absolute stereochemistry. Rotation (+).

10/033,621



RN 211047-07-3 CAPLUS  
CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1S,2S,3R,5R,7R)- (9CI) (CA INDEX NAME)

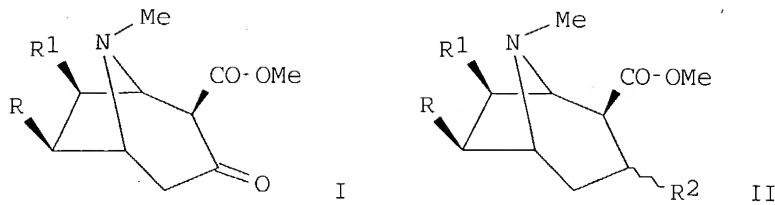
Absolute stereochemistry: Rotation (-).



REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1997:142811 CAPLUS  
DOCUMENT NUMBER: 126:212273  
TITLE: Synthesis of 6- or 7- hydroxy and 6- or 7- methoxy tropanes  
AUTHOR(S): Chen, Zhengming; Meltzer, Peter C.  
CORPORATE SOURCE: Organix Inc., Woburn, MA, 01801, USA  
SOURCE: Tetrahedron Letters (1997), 38(7), 1121-1124  
CODEN: TELEAY; ISSN: 0040-4039  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 126:212273  
GI

10/033,621



AB A novel Mannich type condensation between HO<sub>2</sub>CCH<sub>2</sub>COCH<sub>2</sub>CO<sub>2</sub>Me, methylamine hydrochloride, and OHCC(OH)CH<sub>2</sub>CHO gave stereoselectively exo 6- or 7-substituted β-keto ester tropanones I (R = OH, OMe, R<sub>1</sub> = H; R = H, R<sub>1</sub> = OH, OMe). Further elaboration afforded a series of 6- or 7- hydroxy and 6- or 7- methoxy 2β-methoxycarbonyl-3-aryltropanes II (R<sub>2</sub> = 4-F-C<sub>6</sub>H<sub>4</sub>, 3,4-Cl<sub>2</sub>C<sub>6</sub>H<sub>4</sub>).

IT 187963-22-0P 187963-24-2P 187963-26-4P

187963-46-8P 187963-47-9P 187963-48-0P

187963-49-1P 187963-50-4P 187963-51-5P

187963-52-6P 187963-53-7P 187963-54-8P

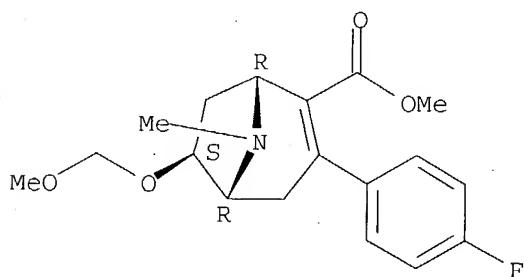
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of 6- or 7-hydroxy and 6- or 7-methoxy tropanes)

RN 187963-22-0 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

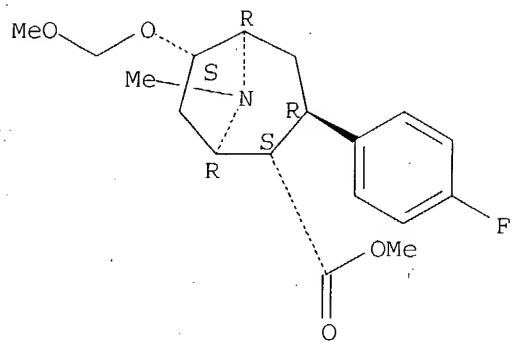


RN 187963-24-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

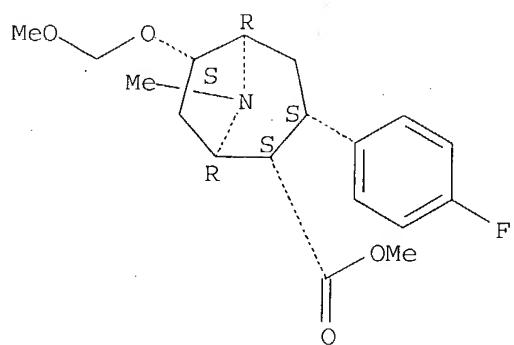
10/033,621



RN 187963-26-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

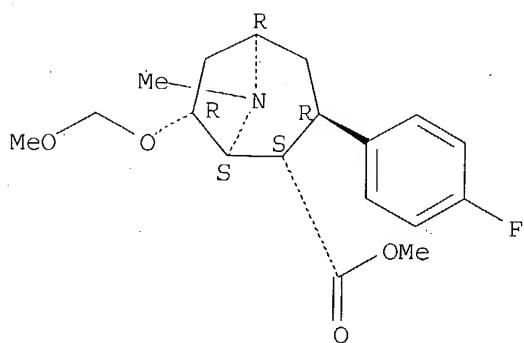
Relative stereochemistry.



RN 187963-46-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

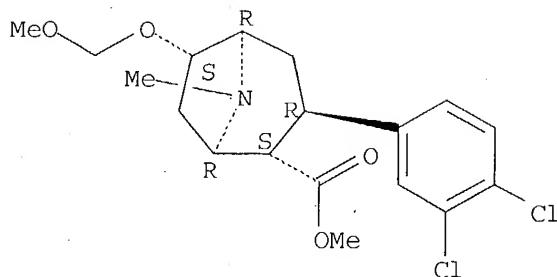


RN 187963-47-9 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

10/033,621

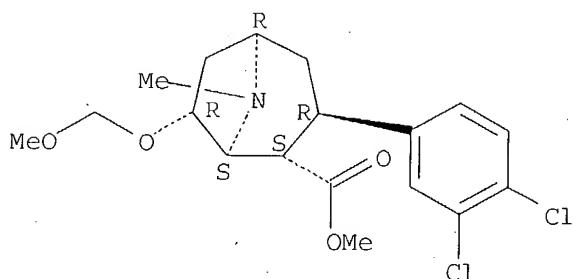
Relative stereochemistry.



RN 187963-48-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

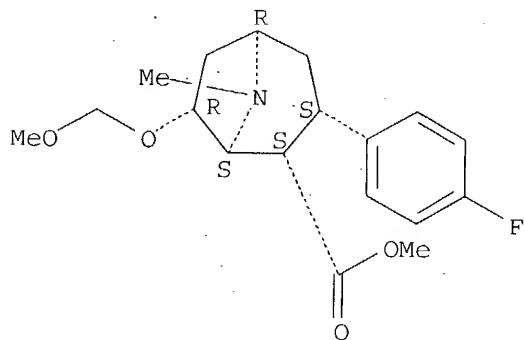
Relative stereochemistry.



RN 187963-49-1 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

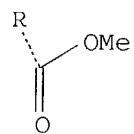
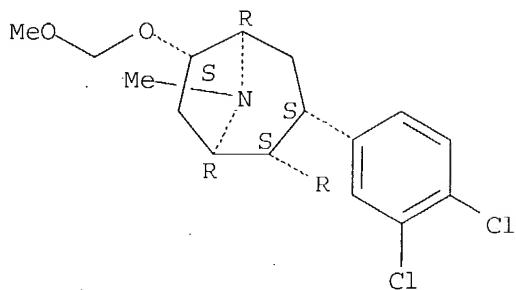


RN 187963-50-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

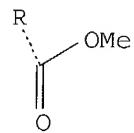
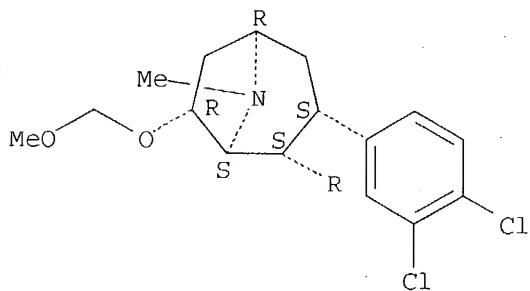
10/033,621



RN 187963-51-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

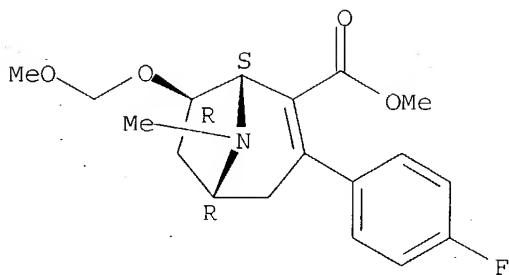


RN 187963-52-6 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(4-fluorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

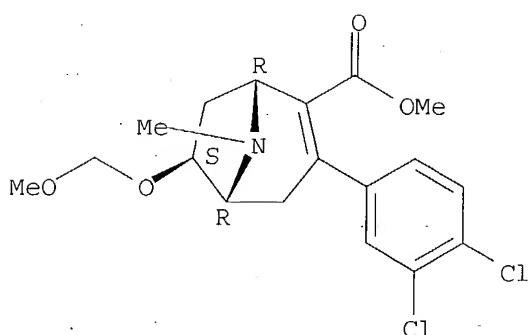
10/033,621



RN 187963-53-7 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-(methoxymethoxy)-8-methyl-, methyl ester, (1R,5R,6S)-rel- (9CI) (CA INDEX NAME)

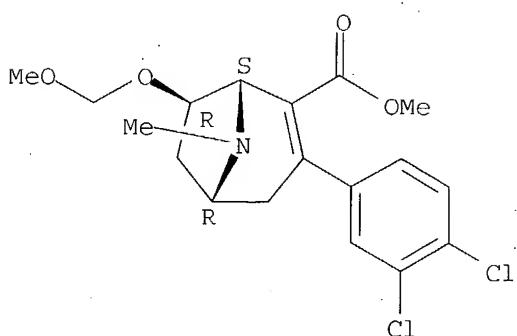
Relative stereochemistry.



RN 187963-54-8 CAPLUS

CN 8-Azabicyclo[3.2.1]oct-2-ene-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-(methoxymethoxy)-8-methyl-, methyl ester, (1R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 187963-13-9P 187963-28-6P 187963-30-0P

187963-32-2P 187963-34-4P 187963-36-6P

187963-38-8P 187963-40-2P 187963-42-4P

187963-43-5P 187963-44-6P 187963-45-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

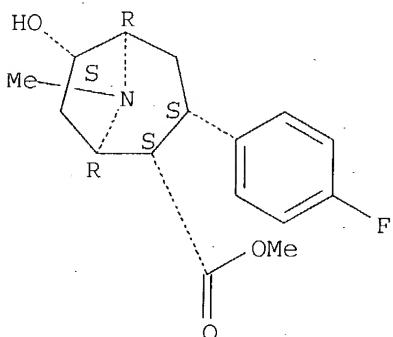
(synthesis of 6- or 7-hydroxy and 6- or 7-methoxy tropanes)

RN 187963-13-9 CAPLUS

10/033,621

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

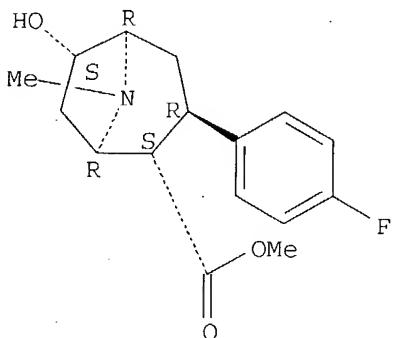
Relative stereochemistry.



RN 187963-28-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

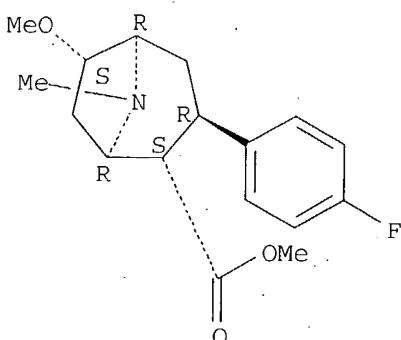
Relative stereochemistry.



RN 187963-30-0 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-6-methoxy-8-methyl-, methyl ester, (2-exo,3-endo,6-exo)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

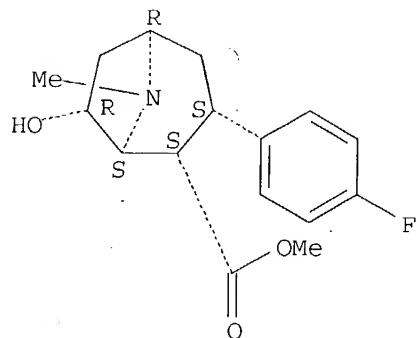


RN 187963-32-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

10/033,621

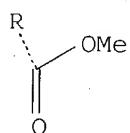
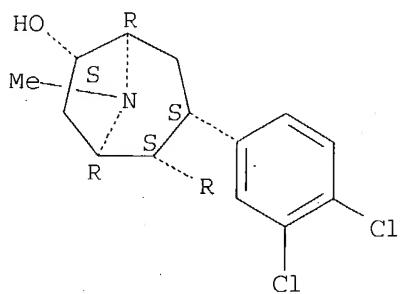
Relative stereochemistry.



RN 187963-34-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3S,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

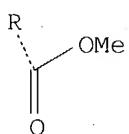
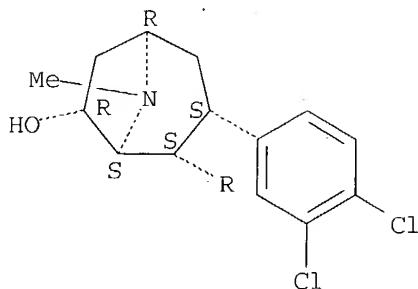


RN 187963-36-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3R,5S,7S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

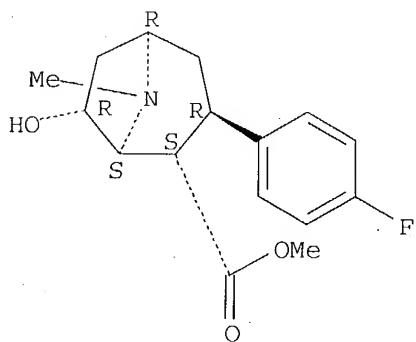
10/033,621



RN 187963-38-8 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX NAME)

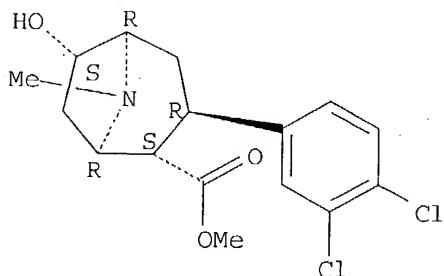
Relative stereochemistry.



RN 187963-40-2 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-hydroxy-8-methyl-, methyl ester, (1R,2S,3R,5R,6S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



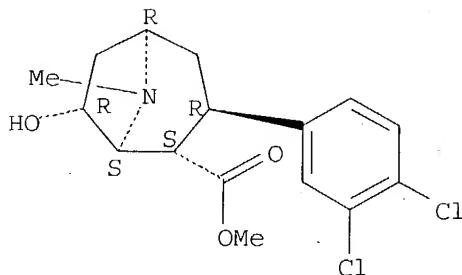
RN 187963-42-4 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-hydroxy-8-methyl-, methyl ester, (1R,2R,3S,5S,7S)-rel- (9CI) (CA INDEX

10/033,621

NAME)

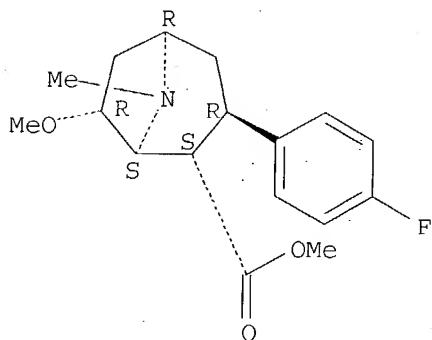
Relative stereochemistry.



RN 187963-43-5 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(4-fluorophenyl)-7-methoxy-8-methyl-, methyl ester, (2-exo,3-endo,7-exo) - (9CI) (CA INDEX NAME)

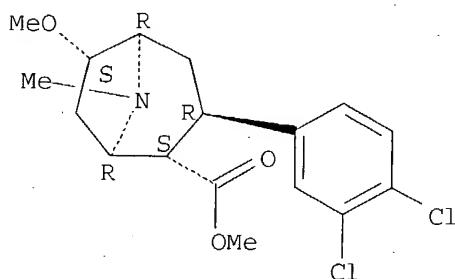
Relative stereochemistry.



RN 187963-44-6 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-6-methoxy-8-methyl-, methyl ester, (2-exo,3-endo,6-exo) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

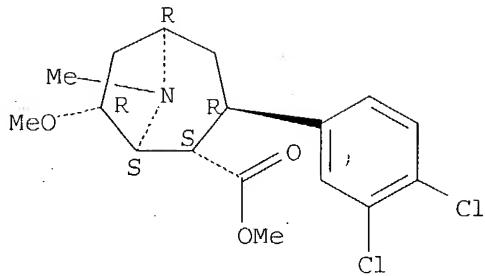


RN 187963-45-7 CAPLUS

CN 8-Azabicyclo[3.2.1]octane-2-carboxylic acid, 3-(3,4-dichlorophenyl)-7-methoxy-8-methyl-, methyl ester, (2-exo,3-endo,7-exo) - (9CI) (CA INDEX NAME)

Relative stereochemistry.

10/033,621



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 12:39:35 ON 27 FEB 2004)

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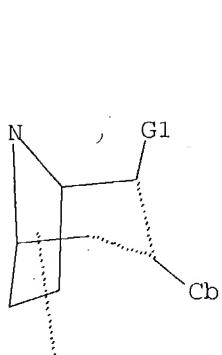
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L1 HAS NO ANSWERS

L1 STR



G1 Ak,[@1]

Structure attributes must be viewed using STN Express query preparation.

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Day : Friday  
 Date: 2/27/2004  
 Time: 12:50:28


**PALM INTRANET**

## Inventor Name Search Result

Your Search was:

Last Name = MELTZER

First Name = PETER

Application#	Patent#	Status	Date Filed	Title
<a href="#">60401836</a>	Not Issued	159	08/06/2002	SYNTHESIS OF ALL FOUR ISOMERS OF 2-(3",4"-DICHLOROPHENYL)-2-(TETRAHYDROPYRA ACETIC ACID METHYL ESTER (1'-OXADICHLOROMETHYLPHENIDE)
<a href="#">60375505</a>	Not Issued	159	04/25/2002	TROPANE COMPOUNDS
<a href="#">60368382</a>	Not Issued	159	03/28/2002	TROPANE COMPOUNDS
<a href="#">60367400</a>	Not Issued	159	03/25/2002	DESIGN AND SYNTHESIS OF A MECHANISM BASED IRREVERSIBLE DOPAMINE-SPARING COCAINE AN
<a href="#">60355111</a>	Not Issued	159	02/08/2002	SYNTHESIS OF A MECHANISM BASED IRREVERSIB DOPAMINE-SPARING COCAINE ANTAGONIST
<a href="#">60328532</a>	Not Issued	159	10/11/2001	NON-AMINES, DRUGS WITHOUT AN AMINE NITRO POTENTLY BLOCK SEROTONIN TRANSPORT: NOV ANTIDEPRESSANT CANDIDATES
<a href="#">60327963</a>	Not Issued	159	10/09/2001	SYNTHESIS OF 6-AND 7-HYDROXY-8-AZABICYCLO OCTANES AND THEIR BINDING AFFINITY FOR THE AND SEROTONIN TRANSPORTERS
<a href="#">60318411</a>	Not Issued	159	09/10/2001	SYNTHESIS AND IODINATION OF ALTROPANE
<a href="#">60313205</a>	Not Issued	159	08/17/2001	THERAPEUTIC TROPANE COMPOUNDS
<a href="#">60300133</a>	Not Issued	159	06/22/2001	METHODS FOR DIAGNOSING AND MONITORING TD AD-HD BY ASSESSING THE DOPAMINE TRANSPOR
<a href="#">60298565</a>	Not Issued	159	06/15/2001	NEUROTRANSMITTER SITE-SPARING ANTAGONIS COCAINE OR OTHER SUBSTANCES ACTING AT MO TRANSPORTERS AND RECEPTORS
<a href="#">60290649</a>	Not Issued	159	05/15/2001	INCORPORATION OF A CANNABINOID AND AN OPI SINGLE COMPOUND
<a href="#">60141540</a>	Not Issued	159	06/28/1999	IMAGING THE DOPAMINE TRANSPORTER TO DETE AD-HD
<a href="#">60133761</a>	Not	159	05/12/1999	DOPAMINE TRANSPORTER IMAGING AGENTS

	Issued			
<u>10400825</u>	Not Issued	030	03/27/2003	TROPANE COMPOUNDS
<u>10374892</u>	Not Issued	030	02/24/2003	COMPOUNDS WITH HIGH MONOAMINE TRANSPORT AFFINITY
<u>10364028</u>	Not Issued	020	02/10/2003	THERAPEUTIC COMPOUNDS
<u>10350151</u>	Not Issued	160	01/23/2003	COMPOUNDS WITH HIGH MONOAMINE TRANSPORT AFFINITY
<u>10222530</u>	Not Issued	071	08/16/2002	THERAPEUTIC TROPANE COMPOUNDS
<u>10097062</u>	Not Issued	161	03/13/2002	TROPANE ANALOGS AND METHODS FOR INHIBITING MONOAMINE TRANSPORT
<u>10095897</u>	Not Issued	041	03/12/2002	METHODS FOR DIAGNOSING AND MONITORING TREATMENT FOR ADHD BY ASSESSING THE DOPAMINE TRANSPORT
<u>10085482</u>	6677338	150	02/28/2002	SEROTONIN TRANSPORT INHIBITORS
<u>10033621</u>	Not Issued	071	12/27/2001	TROPANE ANALOGS AND METHODS FOR INHIBITING MONOAMINE TRANSPORT
<u>09975586</u>	Not Issued	041	10/11/2001	BOAT TROPANES
<u>09932302</u>	Not Issued	071	08/17/2001	METHODS FOR DIAGNOSING AND MONITORING TREATMENT FOR ADHD BY ASSESSING THE DOPAMINE TRANSPORT
<u>09875523</u>	6670375	150	06/06/2001	TROPANE ANALOGS AND METHODS FOR INHIBITING MONOAMINE TRANSPORT
<u>09691396</u>	6525206	150	10/17/2000	COMPOUNDS WITH HIGH MONOAMINE TRANSPORT AFFINITY
<u>09671534</u>	6417221	150	09/27/2000	TROPANE ANALOGS AND METHODS FOR INHIBITING MONOAMINE TRANSPORT
<u>09605621</u>	Not Issued	168	06/28/2000	IMAGING THE DOPAMINE TRANSPORTER TO DETECT AD-HD
<u>09568106</u>	6548041	150	05/10/2000	DOPAMINE TRANSPORTER IMAGING AGENTS
<u>09314441</u>	6353105	150	05/19/1999	TROPANE ANALOGS AND METHODS FOR INHIBITING MONOAMINE TRANSPORT
<u>08980997</u>	Not Issued	164	12/01/1997	USE OF SPIPERON OR SPIPERONE DERIVATIVES AS IMMUNOSUPPRESSANT AGENTS
<u>08893921</u>	5948933	150	07/11/1997	TROPANE ANALOGS AND METHODS FOR INHIBITING MONOAMINE TRANSPORT
<u>08649258</u>	5770180	150	04/26/1996	BRIDGE-SUBSTITUTED TROPANES FOR METHODS AND THERAPY
<u>08605332</u>	5853696	150	02/20/1996	SUBSTITUTED 2-CARBOXYALKYL-3(FLUOROPHENYL)-8-(3-HALO)

NORTROPLANES AND THEIR USE AS IMAGING AGENT NEURODEGENERATIVE DISORDERS				
<u>08552584</u>	6171576	150	11/03/1995	DOPAMINE TRANSPORTER IMAGING AGENT
<u>08548271</u>	Not Issued	161	10/25/1995	COCAINE ANALOGUES AND THEIR USE AS COCAIN THERAPIES AND THERAPEUTIC AND IMAGING AGENT NEURODEGENERATIVE DISORDERS
<u>08256158</u>	5693645	250	08/31/1994	USE OF SPIPERONE OR SPIPERONE DERIVATIVES / IMMUNOSUPPRESSANT AGENTS
<u>08142584</u>	5493026	150	10/25/1993	SUBSTITUTED 2-CARBOXYALKYL-3-(FLUOROPHENYL)-8-(3-HALO NORTROPLANES AND THEIR USE AS IMAGING FOR NEURODEGENERATIVE DISORDERS
<u>08111141</u>	5506359	150	08/24/1993	COCAINE ANALOGUES AND THEIR USE AS COCAIN THERAPIES AND THERAPEUTIC AND IMAGING AGENT NEURODEGENERATIVE DISORDERS
<u>08037271</u>	5484788	150	03/26/1993	BUSPIRONE AS A SYSTEMIC IMMUNOSUPPRESSANT
<u>07934362</u>	Not Issued	161	08/24/1992	COCAINE ANALOGUES AND THEIR USE AS COCAIN THERAPIES AND THERAPEUTIC AND IMAGING AGENT NEURODEGENERATIVE DISORDERS
<u>07893536</u>	5703088	250	06/04/1992	TOPICAL APPLICATION OF SPIPERONE OR DERIVATIVES THEREOF FOR TREATMENT OF PATHOLOGICAL CONDITIONS ASSOCIATED WITH IMMUNE RESPONSES
<u>07893534</u>	5574041	150	06/04/1992	USE OF SPIPERONE DERIVATIVES AS IMMUNOSUPPRESSANTS
<u>06547676</u>	4535157	150	11/01/1983	PROCESS FOR MAKING 6-DESOXY-6-METHYLENENALTREXONE AND 6-DESOXY-6- METHYLENENALTREXONE
<u>06269747</u>	4368585	250	06/02/1981	DISPLAY FRAME FOR DECORATIVE OBJECT

Inventor Search Completed: No Records to Display.

**Search Another:**  
**Inventor**

<b>Last Name</b>	<input type="text" value="Meltzer"/>	<b>First Name</b>	<input type="text" value="Peter"/>
<input type="button" value="Search"/>			

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